

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	235	kouchi-k\$.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/01/19 13:10
L2	428	nagai-r\$.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/01/19 13:11
L3	2525	nagata-s\$.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/01/19 13:16
L4	281538	(kenji ryuji shinya).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/01/19 13:17
L5	143	(1 2 3) and 4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2007/01/19 13:18
L6	22	1 and 2 and 3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OI	<div style="text-align: center;"> <p><i>AUTHOR -</i></p> <p><i>INVENTOR</i></p> <p><i>SEARCH</i></p> <hr/> <p><i>PAT Lit &amp; non</i></p> <p><i>PAT Lit</i></p> <hr/> <p><del>www.sciencedirect.com</del></p> </div>	
L7	45	(1 2 3) and ("600"/\$.ccls. a61b\$ p31\$ "s05"\$)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OI		
L8	166	5 6 7	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OI		

Set	Items	Description
S1	17314	S AU=(KOUCHI K? OR KOUCHI, K? OR NAGAI R? OR NAGAI, R? OR NAGATA S? OR NAGATA, S?)
S2	0	S KOUCHI(2N)KENJI OR NAGAI(2N)RYUJI OR NAGATA(2N)SHINYA
S3	58938	S (BODY OR BIOLOGIC? OR VITAL OR PHYSIOLOGIC?) (2N) (SIGN? ? OR SIGNAL? OR HISTORY? OR HISTORIE?)
S4	2072	S VPC(3N) (VENTRICUL? OR PREMATUR? OR CONTRACTION?) OR VENTRICUL?()PREMATUR?()CONTRACTION?
S5	2426615	S HR(3N) (HEART OR RATE?) OR HEART()RATE? OR PULSE? OR (QT OR QWAVE? OR TWAVE? OR Q()WAVE? OR T()WAVE?) ()INTERVAL?
S6	592747	S SPO2()VALUE? OR OXYGEN()SATURAT? OR BLOOD() (GAS OR GASES OR GASSES) OR ELECTROCARD?
S7	612	S S1:S2 AND S3:S6
S8	0	S S7 AND KOUCHI AND NAGAI AND NAGATA
S9	35	S S7 AND (DISPLAY? OR COMPUTER?)
S10	30	S S9 AND PY=1970:2003
S11	30	S S9 NOT PY=2004:2007
S12	30	S S10:S11
S13	22	RD (unique items)

; show files

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*\*File 73: Elsevier will not provide the daily update to Embase . on January 18. Tomorrow's update will contain both days.*

[File 94] **JICST-EPlus** 1985-2007/Jan W2

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*\*File 94: UD200609W2 is the last update for 2006. UD200701W1 is the first update for 2007. The file is complete and up to date.*

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[File 99] **Wilson Appl. Sci & Tech Abs** 1983-2007/Dec

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[File 431] **MediConf: Medical Con. & Events** 1998-2004/Oct B2

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[File 434] **SciSearch(R) Cited Ref Sci** 1974-1989/Dec

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Set	Items	Description
S1	98	S AU=(KOUCHI K? OR KOUCHI, K? OR NAGAI R? OR NAGAI, R? OR NAGATA S? OR NAGATA, S?)
S2	2	S KOUCHI(2N)KENJI OR NAGAI(2N)RYUJI OR NAGATA(2N)SHINYA
S3	31226	S (BODY OR BIOLOGIC? OR VITAL OR PHYSIOLOGIC?) (2N) (SIGN? ? OR SIGNAL? OR HISTORY? OR HISTORIE?)
S4	61	S VPC(3N) (VENTRICUL? OR PREMATUR? OR CONTRACTION?) OR VENTRICUL?() PREMATUR?() CONTRACTION?
S5	742613	S HR(3N) (HEART OR RATE?) OR HEART() RATE? OR PULSE? OR (QT OR QWAVE? OR TWAVE? OR Q() WAVE? OR T() WAVE?) () INTERVAL?
S6	36882	S SPO2() VALUE? OR OXYGEN() SATURAT? OR BLOOD() (GAS OR GASES OR GASSES) OR ELECTROCARD?
S7	7	S S1:S2 AND S3:S6
S8	7	RD (unique items)

; show files

[File 9] **Business & Industry(R)** Jul/1994-2007/Jan 18  
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[File 441] **ESPICOM Pharm&Med DEVICE NEWS** 2007/Jul W3  
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[File 444] **New England Journal of Med.** 1985-2007/Jan W1  
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[File 624] **McGraw-Hill Publications** 1985-2007/Jan 19  
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*\*File 624: Homeland Security & Defense and 9 Platt energy journals added Please see HELP NEWS624 for more*

[File 635] **Business Dateline(R)** 1985-2007/Jan 19  
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[File 674] **Computer News Fulltext** 1989-2006/Sep W1  
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US 20060260870 A1	US-PGPUB	WO 2003015630 A	DERWENT
US 20060100536 A1	US-PGPUB	WO 2002102247 A	DERWENT
US 20060074321 A1	US-PGPUB	WO 200287436 A	DERWENT
US 20050246366 A1	US-PGPUB		
US 20050228305 A1	US-PGPUB		
US 20050182333 A1	US-PGPUB		
US 20040136260 A1	US-PGPUB		
US 20030058729 A1	US-PGPUB		
US 6813213 B2	USPAT		
US 6690614 B2	USPAT		
JP 2006185380 A	JPO		
JP 2006112140 A	JPO		
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JP 2004071083 A	JPO		
JP 2003196260 A	JPO		
JP 2003144216 A	JPO		
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JP 2003100880 A	JPO		
JP 2003100876 A	JPO		
JP 2001192043 A	JPO		
JP 2001162485 A	JPO		
JP 2001013130 A	JPO		
JP 2001008914 A	JPO		
JP 11328157 A	JPO		
JP 10134569 A	JPO		
JP 08224215 A	JPO		
JP 06261871 A	JPO		
JP 03143875 A	JPO		
WO 2006068145 A1	EPO		
WO 2005089645 A1	EPO		
WO 2005089642 A1	EPO		
EP 1552786 A1	EPO		
EP 1547519 A1	EPO		
EP 1547518 A1	EPO		
EP 1529487 A1	EPO		
EP 1488739 A1	EPO		
WO 2004034902 A1	EPO		
WO 2004023994 A1	EPO		
WO 2004019779 A1	EPO		
WO 2004004561 A1	EPO		
WO 3073931 A1	EPO		
WO 3015630 A1	EPO		
WO 2102247 A1	EPO		
WO 2087436 A1	EPO		
WO 9411355 A1	EPO		
WO 2006068145 A	DERWENT		
JP 2005301600 A	DERWENT		
JP 2005301394 A	DERWENT		
WO 2005089645 A	DERWENT		
WO 2005089642 A	DERWENT		
WO 2004034902 A	DERWENT		
WO 2004023994 A	DERWENT		
WO 2004019779 A	DERWENT		
WO 2004004561 A	DERWENT		
WO 2003073931 A	DERWENT		

= THIS  
APPLICATION

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13/5,K/8 (Item 1 from file: 34) [Links](#)

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05046081 **Genuine Article#:** TL661 **Number of References:** 16

**NEW ALGORITHMIC-BASED DIGITAL-FILTER PROCESSING SYSTEM FOR REAL-TIME  
CONTINUOUS BLOOD-PRESSURE MEASUREMENT AND ANALYSIS IN CONSCIOUS RATS**

**Author:** NAGAI R; NAGATA S

**Corporate Source:** DAINIPPON PHARMACEUT CO LTD,EXPLORATORY RES LABS,DEPT  
PHARMACOL,ENOKI 33-94/SUITA/OSAKA 564/JAPAN/

**Journal:** COMPUTERS IN BIOLOGY AND MEDICINE , 1995 , V 25 , N6 ( NOV ) , P 483-494

**ISSN:** 0010-4825

**Language:** ENGLISH **Document Type:** ARTICLE

**Geographic Location:** JAPAN

**Subfile:** SciSearch; CC LIFE--Current Contents, Life Sciences; CC ENGI--Current Contents, Engineering,  
Technology & Applied Sciences

**Journal Subject Category:** ENGINEERING, BIOMEDICAL; COMPUTER SCIENCE, INTERDISCIPLINARY  
APPLICATIONS

**Abstract:** A new algorithmic-based digital filter processing system for real-time continuous blood pressure (BP) measurement and analysis in freely-moving conscious rats has been developed. Real-time recognition of BP waveforms, real-time noise rejection and determination of representative waveform indexes (WIs) at indicated time points using digital filters and Smirnov's rejection test were realized with this system. Digital filters were applied for two different purposes: waveform segmentation and smoothing the calculations of representative WIs. Smirnov's rejection test was used for real-time noise rejection and yielded an accurate rejection rate of 99.99%. The result was that the digital filter processing and Smirnov's rejection test realized accurate real-time BP measurement and analysis in freely-moving conscious rats using a personal **computer**.

**Descriptors--** Author Keywords: BLOOD PRESSURE ; CONSCIOUS RAT ; NOISE REJECTION ; REAL-TIME  
PROCESSING ; DIGITAL FILTER ; SMIRNOVS REJECTION TEST

**Identifiers--** KeyWords Plus: SPECTRAL-ANALYSIS; UNRESTRAINED RATS; ARTERIAL;  
MICROCOMPUTER; SIGNALS

**Research Fronts:** 94-0468 003 (HEART-RATE-VARIABILITY IN ACUTE MYOCARDIAL-INFARCTION;  
CARDIAC AUTONOMIC TONE; POWER SPECTRAL-ANALYSIS; CORONARY-ARTERY DISEASE)

**Cited References:**

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SHYU BC, 1984, V121, P103, ACTA PHYSIOL SCAND

SHYU BC, 1976, V128, P515, ACTA PHYSIOL SCAND

WEISSENBURGER J, 1985, V14, P89, J PHARMACOL METHOD

**Author:** NAGAI R; NAGATA S

, 1995

**Abstract:** ...accurate real-time BP measurement and analysis in freely-moving conscious rats using a personal computer.

**Research Fronts:** 94-0468 003 (HEART-RATE-VARIABILITY IN ACUTE MYOCARDIAL-INFARCTION; CARDIAC AUTONOMIC TONE; POWER SPECTRAL-ANALYSIS; CORONARY-ARTERY DISEASE)



13/5,K/12 (Item 1 from file: 94) [Links](#)

JICST-EPlus

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03655241 JICST Accession Number: 98A0753370 File Segment: JICST-E

**Animating the Scattering of Electromagnetic Waves.**

HATANO R (1); HATA S (1); NAGATA S (1); SAEKI K (1); TANAKA T (1); FUJIMURA M (1); TAKENAKA T (1); KURODA H (1)

(1) Nagasaki Univ., Nagasaki

Denki Gakkai Denjikai Riron Kenkyukai Shiryo , 1998 , VOL.EMT-98,NO.39-52 , PAGE.67-71 , FIG.2, REF.4

**Journal Number:** Z0909AAV

**Universal Decimal Classification:** 532.08+532.5

**Language:** English **Country of Publication:** Japan

**Document Type:** Conference Proceeding

**Article Type:** Original paper

**Media Type:** Printed Publication

**Abstract:** It does not seem to be easy for undergraduate students to understand nature of electromagnetic wave. We have just got started on a project to animate the scattering phenomena of electromagnetic wave and show the animations to students so that they can easily understand the phenomena. As a first step of the project, we have tried to animate the simple reflection and transmission phenomena of a plane **pulse** wave by an one-dimensional dielectric slab. We have developed a **computer** program in which students can set by themselves the values of a variety of parameters such as the thickness, the permittivity of the slab, and the **pulse** shape and watch the real-time animation being performed. Moreover, using the JAVA language for the code one can see the interactive animation on the Internet. (author abst.)

**Descriptors:** electromagnetic wave scattering; **computer** animation; **computer** simulation; simulator; school education; science education; electromagnetic wave reflection; electromagnetic wave transmission; plane wave; **pulse** wave(physics)

**Broader Descriptors:** scattering; animation; image technology; technology; **computer** graphics; **computer** application; utilization; simulation; education; education and training; reflection; transmission(propagation); wave motion; waveform

**Classification Codes:** BD01020N

HATANO R (1); HATA S (1); NAGATA S (1); SAEKI K (1); TANAKA T (1); FUJIMURA M (1); TAKENAKA T (1); KURODA H (1) , 1998

**Abstract:** ...project, we have tried to animate the simple reflection and transmission phenomena of a plane **pulse** wave by an one-dimensional dielectric slab. We have developed a **computer** program in which students can set by themselves the values of a variety of parameters such as the thickness, the permittivity of the slab, and the **pulse** shape and watch the real-time animation being performed. Moreover, using the JAVA language for ...

**Descriptors:** ...**computer** animation... ...**computer** simulation... ...**pulse** wave(physics)

**Broader Descriptors:** ...**computer** graphics... ...**computer** application

13/5,K/20 (Item 1 from file: 155) [Links](#)

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MEDLINE(R)

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14274307 **PMID:** 12710316

**Role of vagal control in vasovagal syncope.**

Suzuki Masaru; Hori Shingo; Nakamura Iwao; **Nagata Shinya**; Tomita Yutaka; Aikawa Naoki

Department of Emergency Medicine, School of Medicine, Keio University, Tokyo.

Pacing and clinical electrophysiology - PACE ( United States ) Feb 2003 , 26 (2 Pt 1) p571-8 , ISSN:

0147-8389--Print **Journal Code:** 7803944

Publishing Model Print

**Document type:** Journal Article

**Languages:** ENGLISH

**Main Citation Owner:** NLM

**Record type:** MEDLINE; Completed

**Subfile:** INDEX MEDICUS

The vasovagal reaction is thought to be caused by sympathetic withdrawal and vagal augmentation. While measurements of muscle sympathetic nerve activity support sympathetic withdrawal in tilt induced syncope, the results of previous attempts to quantify vagal control using spectral analyses of **heart rate** variability (HRV) remain controversial. The sampling period used in the HRV studies is related to the discordant results. In the present study, HRV was computed every second using wavelet transformation to clarify the role of vagal control in tilt induced syncope during the 80-degree head-up tilt test (positive: 10 patients with vasovagal syncope; negative: 10 patients with vasovagal syncope, and 10 control subjects). Autonomic modulations were assessed using the absolute power of the low frequency (LF) (0.04-0.15 Hz) and high frequency (HF) (0.15-2.00 Hz) oscillatory components of R-R variability. Although the LF did not change during the tilt procedure, a decrease in the systolic arterial pressure (SAP) and increases in the R-R interval and HF were observed for the last 30 seconds before the tilt induced syncope in the tilt-positive group. Analyzing the hemodynamic measurements and spectral indices for the last 5 minutes preceding the tilt induced syncope, the study found that the SAP, R-R interval, and HF changed simultaneously during the 30-second period immediately before the tilt induced syncope. Further, the HF was positively correlated with the R-R interval and negatively correlated with the SAP. In conclusion, continuous spectral analysis of the R-R interval demonstrated increased vagal influence on the heart in tilt induced syncope.

**Tags:** Female; Male

**Descriptors:** \*Syncope, Vasovagal--physiopathology--PP; \*Vagus Nerve--physiology--PH ; Adult; Autonomic Nervous System--physiopathology--PP; Blood Pressure --physiology--PH; Case-Control Studies;

**Electrocardiography; Heart Rate--physiology--PH; Humans; Signal Processing, Computer-Assisted; Syncope, Vasovagal--diagnosis--DI; Tilt-Table Test; Time Factors**

**Record Date Created:** 20030424

**Record Date Completed:** 20030718

Suzuki Masaru; Hori Shingo; Nakamura Iwao; **Nagata Shinya**; Tomita Yutaka; Aikawa Naoki

...2003

...induced syncope, the results of previous attempts to quantify vagal control using spectral analyses of **heart rate** variability (HRV) remain controversial. The sampling period used in the HRV studies is related to...

; Adult; Autonomic Nervous System--physiopathology--PP; Blood Pressure --physiology--PH; Case-Control Studies; **Electrocardiography; Heart Rate--physiology--PH; Humans; Signal Processing, Computer-Assisted; Syncope, Vasovagal--diagnosis--DI; Tilt-Table Test; Time Factors**

13/5,K/21 (Item 2 from file: 155) [Links](#)

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11169966 PMID: 9015744

**New algorithms for real-time, 24 hr continuous and noise-adjusted power spectral analysis of heart rate and blood pressure fluctuations in conscious rats.**

**Nagai R; Nagata S**

Department of Pharmacology I, Dainippon Pharmaceutical Co., Ltd., Osaka, Japan.

Japanese journal of pharmacology ( JAPAN ) Dec 1996 , 72 (4) p355-64 , ISSN: 0021-5198--Print **Journal Code: 2983305R**

Publishing Model Print

**Document type:** Journal Article

**Languages:** ENGLISH

**Main Citation Owner:** NLM

**Record type:** MEDLINE; Completed

**Subfile:** INDEX MEDICUS

The effective combination of C++ and assembler could realize real-time power spectral analysis of various fluctuation indexes simultaneously. The blood pressure (BP) waveform indexes (WIs) analyzed simultaneously were **heart rate (HR)**, systolic blood pressure (SBP), mean blood pressure (MBP) and diastolic blood pressure (DBP). Power amplitudes (very low frequency, VLFamp; low frequency, LFamp; and high frequency, HFamp) were evaluated by accurate BP waveform recognition, accurate automatic rejection of outliers, baseline adjustment in periodograms and digital filtering of each amplitude. In the in vivo experiments, the amplitudes were changed in a dose-dependent manner by methylatropine (HR-VLFamp, HR-LFamp and HR-HFamp), phentolamine (HR-LFamp, SBP-VLFamp, SBP-LFamp and SBP-HFamp) and propranolol (HR-LFamp and SBP-LFamp). The absolute correlation coefficients of the amplitude and the change in each parameter were more than 0.96. In conclusion, this real-time, noise-adjusted power spectral analysis system for investigating HR and BP fluctuations enabled us to accurately evaluate autonomic nerve activity in conscious rats. Moreover, unlike other systems, this system was able to detect the biphasic changes in SBP-HFamps caused by phentolamine.

**Descriptors:** \*Algorithms; \*Blood Pressure--physiology--PH; \*Heart Rate --physiology--PH ; Animals; Area Under Curve; Computers; Rats; Rats, Wistar; Reference Values; Software

**Record Date Created:** 19970528

**Record Date Completed:** 19970528

**New algorithms for real-time, 24 hr continuous and noise-adjusted power spectral analysis of heart rate and blood pressure fluctuations in conscious rats.**

**Nagai R; Nagata S**

...1996

...of various fluctuation indexes simultaneously. The blood pressure (BP) waveform indexes (WIs) analyzed simultaneously were heart rate (HR), systolic blood pressure (SBP), mean blood pressure (MBP) and diastolic blood pressure (DBP). Power amplitudes...

**Descriptors:** \*Algorithms; \*Blood Pressure--physiology--PH; \*Heart Rate --physiology--PH ; Animals; Area Under Curve; Computers; Rats; Rats, Wistar; Reference Values; Software

Set	Items	Description
S1	35745	S ELECTROPHYSIOLOG? OR HEMODYNAMIC? OR HAEMODYNAMIC?
S2	301438	S (BODY OR BIOLOGIC? OR VITAL OR PHYSIOLOGIC? OR MEDICAL? OR PATIENT? OR OUTPATIENT? OR INPATIENT?) (2N) (SIGN? ? OR SIGNAL? OR OUTPUT? OR DATA? OR READING? OR REPORT? OR INPUT?)
S3	61	S VPC(3N) (VENTRICUL? OR PREMATUR? OR CONTRACTION?) OR VENTRICUL?()PREMATUR?()CONTRACTION?
S4	743290	S HR(3N) (HEART OR RATE?) OR HEART()RATE? OR PULSE? OR (QT OR QWAVE? OR TWAVE? OR Q()WAVE? OR T()WAVE?) ()INTERVAL?
S5	42946	S SPO2()VALUE? OR OXYGEN() (SATURAT? OR VALUE? OR LEVEL? OR PARAMETER?) OR BLOOD() (GAS OR GASES OR GASSES) OR ELECTROCARD?
S6	139494	S HRV(3N) (HEART OR RATE OR VARIABILITY) OR SYSTOLIC? OR DIASTOL? OR (BLOOD OR ARTER?) ()PRESSUR?
S7	15646	S WAVEFORM() (INDEX? OR INDICE?) OR OXIMET? OR PLESTHYM? OR (BREATH? OR RESPIRAT?) ()RATE?
S8	1169342	S S1:S7
S9	6545	S (DISPLAY? OR GRAPHIC? OR VISUAL?) () (OBJECT? OR SIGNAL? OR INDICATOR?) OR ICON? ?
S10	79627	S INDICATOR? OR GRAPH? ? OR CHART? ? OR DIAGRAM?
S11	28381	S INSIGNIA OR REPRESENTATION? ? OR PICTORIAL OR DRAWING? ?
S12	100921	S (PERSONAL? OR CUSTOM? OR TAILOR? OR ONLINE) (2N) (ID OR IDENTIFIER? OR LOGO? OR SYMBOL? OR SIGNIFIER? OR OBJECT? OR PERSONA?)
S13	2929	S AVATAR? OR EMOTICON? OR FIGURINE? OR SMALL(2N) (IMAGE? OR GRAPHIC? OR BITMAP?) OR METAPHOR?
S14	3108	S (SCREEN? OR ELECTRONIC?) (2N) (REPRESENTATION? OR PICTUR? OR PICTOR? OR IMAGE? OR SYMBOL? OR FIGURE?) OR SPRITE?
S15	5678	S GRAPHICOBJECT? OR WIZARD? OR PIXIE? OR JINI? OR GENIE? OR TUTORIAL?
S16	7073	S (VIRTUAL? OR ANTHROPOMORPH? OR CARTOON? OR TOON? ? OR ANIMAT? OR GRAPHIC? OR VISUAL?) (3N) (CHARACTER? OR CREATUR? OR ENTIT? OR ASSISTANT? OR SYMBOL? OR REPRESENTATION? OR AGENT? OR INTERFACE?)
S17	45289	S CIRCL? OR CIRCULAR? OR CURVE? OR CURVAT? OR INCURV? OR PIESHAP? OR PIE(2N)SHAPE? OR PIECHART? OR PIE()CHART?
S18	47069	S CONCAV? OR CONVEX? OR ROUND? OR (DISH OR DISK OR DISC OR PLATE? OR SAUCER?) ()SHAPE?
S19	36087	S ARC OR ARCED OR ARCH??? OR ARCUAT? OR ARCIFORM? OR SEMICIRC?
S20	15105	S SPHERE? OR SPHERIC? OR ORB OR ORBS OR ORBED OR BALL OR BALLSHAP? OR DISCSHAP? OR DISKSHAP? OR DISHSHAP?
S21	209852	S HISTORY OR HISTORIE? OR ARCHIV? OR CHRONOLOG? OR PAST OR TIMESTAMP? OR TIMEDAT?
S22	47847	S TIME() (STAMP? OR DATE? OR SERIE?) OR YESTER? OR BASAL
S23	467640	S PRIOR? OR BEFORE? OR EARLIER OR PREVIO
S24	691601	S EARLY OR PRE OR LAST OR ANTECEDENT OR I
S25	165471	S BACKHISTORY OR BACKSTORY OR BACKGROUND RECORD? ? OR CHRONICLE? ? OR ANNALS
S26	34252	S CASEHISTOR? OR REGRESSI? OR HERITAG? OF
S27	134	S S8 AND S1:S7(10N)S9:S16 AND S9:S16(10N)
S28	111	S S27 AND PY=1970:2003
S29	111	S S27 NOT PY=2004:2007
S30	111	S S28:S29
S31	96	RD (unique items)

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